

Consumption Tax and Economic Growth in Nigeria

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A This study investigated the relationship between consumption tax—specifically Value Added Tax (VAT) and Electronic Money Transfer Levy (EMTL)—and economic growth in Nigeria from 2009 to 2024. The primary aim is to assess how these taxes influence Gross Domestic Product (GDP) and Per Capita Income (PCI). Employing a positivist research approach, the study utilises a causal-comparative design, analysing time series data sourced from the Central Bank of Nigeria and the Federal Inland Revenue Service. The findings reveal a weak negative correlation between VAT and GDP ($r = -0.085$), indicating that VAT changes do not significantly impact economic growth in Nigeria, as only 0.72% of the variance in GDP is explained by VAT fluctuations. These results underscore the limited effectiveness of VAT in stimulating economic growth and enhancing individual income levels in Nigeria. The study emphasises the need for comprehensive economic reforms that address structural challenges, such as infrastructure deficits, inadequate investment levels, and regulatory inefficiencies. Policymakers are urged to consider broader fiscal strategies beyond mere tax measures to achieve meaningful improvements in economic performance and income distribution. Ultimately, the findings contribute significantly to the existing literature on tax policy and economic growth in developing countries. They highlight the necessity for a multi-faceted approach to fiscal policy in Nigeria, integrating various strategies that can effectively stimulate growth and improve the living standards of the population.

Keywords: Consumption Tax, Economic Growth, Economic Reforms, Gross Domestic Product, Value added Tax.

1. Introduction

Consumption taxes have become an important source of revenue generation in many countries, and Nigeria is no exception. The Nigerian tax system is designed to include various forms of indirect taxes, among which Value Added Tax (VAT) and the Electronic Money Transfer Levy (EMTL) are the most prominent. VAT, introduced in 1993, is levied on the value added at each stage of production or distribution, and it applies to nearly all goods and services except a few exempted categories. As of recent reforms, the VAT rate in Nigeria stands at 7.5%, up from 5% in 2020, reflecting a desire to boost government revenues (Agba, 2020). VAT has become one of the most significant sources of revenue, contributing to the funding of government expenditure in sectors such as infrastructure, healthcare, and education. According to Ezeani and Ugwuanyi (2021), VAT accounted for a substantial proportion of the government's non-oil revenue, and its efficient collection has been pivotal in addressing fiscal deficits. In addition to VAT, Nigeria has introduced the Electronic Money Transfer Levy (EMTL) as part of the ongoing effort to modernise its tax system and expand its revenue base. The EMTL, which was introduced in 2016, is a tax on all electronic transfers of funds within the country. It aims to tap into the growing trend of cashless transactions and ensure that financial flows are adequately taxed (Omonona, 2020). With the increasing use of mobile money services, online banking, and digital payments, the EMTL has become an important mechanism to generate revenue, especially in a country with a large informal economy where traditional tax collection methods often face significant challenges. Despite the presence of these taxes, Nigeria's tax-to-GDP ratio remains relatively low compared to global standards, with only 6-7% of GDP being generated from tax revenues (Ayodele & Adeyemi, 2020). This low ratio highlights

the inefficiencies and challenges in the Nigerian tax system, particularly in tax compliance and collection. The complexity of Nigeria's tax system, compounded by issues like tax evasion, corruption, and a weak tax administration, has resulted in the underperformance of tax revenue generation. Hence, while consumption taxes like VAT and EMTL have been effective in contributing to revenue, there remains a significant gap in their full potential to support the Nigerian economy (KPMG, 2020). Nigeria, Africa's largest economy, has faced significant economic challenges despite its abundant resources. In recent years, Nigeria has experienced fluctuations in its economic growth, largely due to external factors such as oil price volatility and internal issues like infrastructure deficits and political instability (Chukwuma, 2021). While oil remains a dominant contributor to Nigeria's revenue, the country's reliance on oil exports has made its economy highly vulnerable to fluctuations in global oil prices. The fall in oil prices during the 2014–2016 period led to a recession, and even though the economy rebounded in 2017, the growth rates have been inconsistent. According to the National Bureau of Statistics (NBS), Nigeria's GDP grew by 2.27% in 2018, 2.10% in 2019, and contracted by -1.92% in 2020 due to the COVID-19 pandemic and other socio-economic factors (NBS, 2021). The COVID-19 pandemic further highlighted Nigeria's economic vulnerabilities, as it disrupted both global trade and domestic production. The Nigerian economy has been heavily impacted by supply chain disruptions, increased inflation, and a significant drop in oil prices during the early months of the pandemic. Moreover, high unemployment rates and poverty levels continue to challenge the economic structure. As of 2020, Nigeria's unemployment rate stood at 27.1%, one of the highest globally (World Bank, 2020). This highlights the urgent need for economic diversification and sustainable growth strategies. Economic growth, therefore, has been sluggish, with the need for long-term structural reforms, investment in infrastructure, and diversification of the economy to reduce the reliance on oil. Given these challenges, it is essential for Nigeria to tap into alternative sources of revenue to stimulate economic growth. The importance of consumption taxes, particularly VAT and EMTL, cannot be overstated. These taxes have the potential to enhance government revenue, which could, in turn, be used for infrastructural development, poverty alleviation, and job creation - factors critical to driving economic growth. However, to achieve this, Nigeria needs to address the inefficiencies in tax collection, improve the tax administration system, and increase tax compliance across the country (Ita, 2021). Thus, understanding the impact of consumption taxes on economic growth is critical for designing effective policies that can support sustainable economic development in the face of various socio-economic challenges.

Value Added Tax (VAT) plays a crucial role in the economic development of countries by contributing significantly to government revenues, which are essential for public investment in key areas like infrastructure, education, and healthcare. In Nigeria, VAT has been one of the main sources of non-oil revenue, helping to diversify government income away from the volatile oil sector (Chigbu & Ezeani, 2019). According to the Federal Inland Revenue Service (FIRS), VAT revenue accounted for approximately 30% of total non-oil tax revenue in 2019 (FIRS, 2020). This significant contribution has made VAT a vital tool in supporting economic growth by funding public services and stimulating aggregate demand through government spending. The relationship between VAT and economic growth is multifaceted. On one hand, VAT serves as a means of raising revenue for the government, allowing for public investment in infrastructure, which in turn can stimulate economic activities and promote growth. On the other hand, VAT can influence consumer behaviour, as an increase in VAT rates can lead to higher prices for goods and services, which may reduce consumer spending. While some studies suggest that the impact of VAT on economic growth is positive due to its revenue-generating potential, others argue that higher VAT rates can exacerbate inflation and inequality, especially in developing economies like Nigeria (Adeniran & Alabi, 2021).

In Nigeria, the VAT rate has remained relatively low compared to other countries, which can be seen as a missed opportunity to maximise revenue. However, the recent increase in VAT from 5% to 7.5% in 2020 was a step towards improving the tax system, though its effects on economic growth are yet to be fully realised (Ogunleye & Abiola, 2020). As such, this study will explore the relationship between VAT and Gross Domestic Product (GDP) as well as Per Capita Income (PCI), to better understand how changes in VAT rates affect the overall economic performance of Nigeria. It is crucial to assess whether VAT revenue contributes to reducing economic disparities and whether its

impact on economic growth is more significant than the potential inflationary effects it may cause. Consumption taxes, including VAT and electronic transaction levies, are critical sources of government revenue in developing countries. As nations like Nigeria strive to diversify their economies and reduce dependency on volatile commodities like oil, consumption taxes provide a stable and predictable source of revenue. In many developing countries, consumption tax revenues contribute significantly to financing development programs, including infrastructure projects, social services, and education (Tadesse & Medhin, 2020). However, the relationship between consumption tax revenue and economic growth in developing countries remains complex, as it involves a delicate balance between the effectiveness of tax collection, the administrative capacity of tax authorities, and the level of public compliance. In the context of Nigeria, the potential for consumption taxes to drive economic growth is evident but constrained by factors like weak tax administration, high levels of tax evasion, and a large informal economy. Nevertheless, there is a growing recognition that improved tax collection, particularly through VAT and EMTL, can enhance fiscal capacity and contribute to economic stability (Ojo & Omorogie, 2021). Research has shown that efficient consumption tax systems, coupled with sound economic policies, can create a favourable environment for sustainable growth. However, to maximise the contribution of consumption tax revenue to economic growth, it is essential to address issues related to tax equity, administrative efficiency, and public trust (Gohari & Adesola, 2019). This study aims to analyse the contribution of consumption taxes, particularly VAT and EMTL, to economic growth in Nigeria by evaluating their impact on GDP. By examining how these taxes influence the broader economy, the study will offer insights into how Nigeria can improve its tax policies to foster inclusive economic growth in the future.

The relationship between consumption tax revenue and economic growth in Nigeria has been widely studied, yet inconsistencies and critical gaps persist in empirical findings. Many studies, such as those by Adegbite and Adesina (2019) and Ajibola and Nwachukwu (2022), have established a positive link between VAT and gross domestic product (GDP), suggesting that increased VAT revenue enhances economic performance. However, other studies, including Ekwueme and Obi (2018), argue that VAT disproportionately affects lower-income earners, reducing disposable income and limiting consumption, which in turn slows economic growth. Additionally, most existing studies focus exclusively on VAT without considering emerging forms of consumption taxation, such as the electronic money transfer levy (EMTL), which has gained prominence due to Nigeria's growing digital economy. The failure to assess the independent effects of VAT and EMTL creates a knowledge gap, making it unclear how different types of consumption tax influence GDP and per capita income. This study aims to bridge this gap by analysing both VAT and EMTL regarding economic growth indicators. The study aims to examine the relationship between consumption tax revenue and economic growth in Nigeria.

HO1: There is no significant relationship between value-added tax and gross domestic product in Nigeria.

2. Literature Review

Adebayo and Yusuf (2018) conducted a study assessing the relationship between tax revenue, particularly consumption taxes, and Nigeria's economic growth from 1990 to 2017. The study employed multiple regression analysis to evaluate the impact of VAT and excise duties on GDP growth. The findings showed that VAT had a significant positive effect on GDP, whereas excise duties exhibited a weaker correlation. The study revealed that the Nigerian government relied heavily on oil revenue, and consumption taxes remained under-utilised as a source of public finance. The authors suggested that diversifying the revenue base by improving VAT collection and broadening the tax net would contribute to sustainable economic growth. Additionally, the study emphasised the need for a transparent tax system to boost taxpayer confidence and compliance. Adebayo and Yusuf (2018) recommended policy measures such as reducing VAT exemptions, improving tax enforcement, and using digital tools for tax collection. They also noted that countries with effective consumption tax policies, such as South Africa and Kenya, had achieved higher revenue mobilisation rates than Nigeria, serving as a model for improvement. Adebayo et al. (2018) conducted a study on the macroeconomic effects of VAT and excise duties in Nigeria from 1990 to 2017. The study utilised a

Computable General Equilibrium (CGE) model to analyse the impact of consumption taxes on GDP growth, employment, and inflation. The results indicated that an increase in VAT led to higher government revenue and GDP growth, but also caused marginal job losses in labour-intensive sectors. Excise duties, on the other hand, had inflationary effects, as higher production costs were passed on to consumers. The study recommended a balanced approach to taxation, ensuring that tax increases were matched with social safety nets to protect vulnerable populations. Adebayo et al. (2018) concluded that Nigeria's long-term economic growth depended on an efficient and equitable tax system.

Adegbite and Salawu (2021) examined the stabilising effect of consumption taxes on Nigeria's economy from 2000 to 2020. Using Cointegration and Granger Causality tests, the study assessed whether VAT and excise taxes provided a stable revenue base for the government and contributed to economic resilience during periods of oil revenue fluctuations. Findings revealed that VAT revenue exhibited a strong causal relationship with GDP growth, meaning that an increase in VAT collection led to a proportional rise in economic activity. The study also found that during the 2016 economic recession, VAT revenue remained relatively stable compared to oil revenue, highlighting the need for further reliance on indirect taxation as a fiscal stabilisation tool. However, the study identified several challenges, including low VAT compliance rates, inefficient tax audits, and poor taxpayer education. Adegbite and Salawu (2021) suggested that increasing VAT enforcement through digital tax records and automated payment systems could significantly enhance compliance. The authors concluded that Nigeria needed a more robust consumption tax policy to ensure stable government financing, particularly during economic downturns. Adekunle and Fasanya (2020) analysed the impact of consumption tax revenue on government revenue and fiscal sustainability in Nigeria from 1995 to 2019. The study employed the Autoregressive Distributed Lag (ARDL) model to examine the relationship between Value Added Tax (VAT), excise duties, and total government revenue. Findings revealed that VAT had a significant positive impact on government revenue in both the short and long run. Adekunle and Fasanya (2020) recommended a broader VAT base and improved compliance mechanisms to ensure that consumption tax revenue remained a reliable source of government funding. They concluded that if properly managed, VAT could serve as a sustainable alternative to oil revenue, reducing Nigeria's vulnerability to oil price shocks. Adewale and Johnson (2023) examined the impact of consumption tax revenue on Nigeria's economic growth from 1995 to 2022. Using the Autoregressive Distributed Lag (ARDL) Model, they analysed the short-run and long-run effects of Value Added Tax (VAT) and excise duties on Gross Domestic Product (GDP). Their findings revealed that VAT had a significant positive effect on GDP in the long run, suggesting that VAT revenue enhances government spending on infrastructure and social programs, which in turn stimulates economic activity. However, in the short run, the effect was not statistically significant, as tax administration inefficiencies and low compliance rates affected revenue generation. The study recommended enhancing tax collection efficiency, reducing tax evasion, and increasing public awareness to ensure a sustainable VAT system. It concluded that Nigeria needs to optimise its tax policies to fully harness the growth potential of consumption tax revenue.

Adewale et al. (2022) assessed the impact of VAT reforms on Nigeria's economic development, using data from 2005 to 2021. The study applied the Difference-in-Differences (DiD) method to analyse how changes in VAT rates affected GDP growth, inflation, and household consumption. The findings revealed that increasing VAT from 5% to 7.5% in 2020 led to an immediate increase in government revenue, but also caused a temporary reduction in consumer spending due to higher prices on taxable goods. However, in the long run, the VAT increase contributed to higher public investment in infrastructure and social services, which stimulated economic growth. The study concluded that moderate VAT increases, if combined with strong social welfare policies, could enhance economic development without imposing excessive burdens on low-income earners. Adewale et al. (2022) recommended gradual VAT adjustments rather than abrupt increases to ensure economic stability. Adeyemi and Yusuf (2021) explored how consumption taxes, including VAT and excise duties, contribute to public revenue generation in Nigeria. Using time-series data from 1995 to 2020 and the Vector Error Correction Model (VECM), they examined the dynamic relationship between VAT, excise duties, and total government revenue. Findings revealed that VAT had a positive and statistically significant impact on government revenue, but excise duties

had a negative impact due to high rates of tax evasion and smuggling of taxable goods. The study also highlighted that Nigeria's VAT-to-GDP ratio was one of the lowest in Africa, suggesting that the country was not fully leveraging its consumption tax potential. Adeyemi and Yusuf (2021) recommended expanding the VAT base, improving tax compliance, and introducing digital tax collection systems to enhance revenue generation. They concluded that a well-structured consumption tax system could reduce Nigeria's over-reliance on oil revenue. Additionally, Ajakaiye (2019) noted that a well-structured tax system would lead to a broader tax base, reducing the pressure on direct taxes while increasing public sector investment in infrastructure. The study also compared Nigeria's VAT revenue-to-GDP ratio with other African economies such as South Africa and Ghana, revealing that Nigeria lagged due to a relatively low VAT rate and poor enforcement. The research suggested that an increase in VAT rates, accompanied by proper administration, could significantly improve revenue without adversely affecting consumption levels. Finally, the study concluded that Nigeria's economic growth could benefit more from a structured and efficient consumption tax system, urging policymakers to focus on enforcement and public awareness campaigns to ensure compliance. Ajibola and Nwachukwu (2022) assessed the impact of VAT reforms on economic growth in Nigeria, particularly following the 2020 increase in VAT from 5% to 7.5%. The study used a Synthetic Control Method (SCM) to compare Nigeria's economic performance before and after the VAT increase. Results showed that while the VAT increase led to a temporary decline in consumer spending, it also resulted in higher government revenue, which was used for infrastructure development and social welfare programs. In the long run, the VAT reform had a net positive effect on economic growth, as improved public investment contributed to higher productivity. However, the study also found that businesses in the informal sector were disproportionately affected by the VAT increase, as they could not pass on additional costs to consumers. Ajibola and Nwachukwu (2022) recommended gradual VAT increases, accompanied by taxpayer education and incentives for formalising informal businesses. Babalola et al. (2021) examined the contribution of consumption taxes, including VAT and excise duties, to Nigeria's economic development between 1995 and 2020. Using the Johansen co-integration technique and Vector Error Correction Model (VECM), the study analysed the long-run relationship between consumption tax revenue and GDP. The findings indicated that VAT had a statistically significant positive impact on GDP, while excise duties had a less pronounced effect. The study highlighted that VAT was a stable source of government revenue, contributing significantly to infrastructure development, education, and healthcare financing. However, despite the increasing VAT revenue, Nigeria's tax-to-GDP ratio remained lower than the African average. The researchers identified policy inconsistency, weak enforcement, and widespread tax evasion as major challenges affecting VAT collection efficiency. Furthermore, the study suggested that increasing VAT compliance rates through digital tax reforms and automated collection systems would enhance revenue generation. Babalola et al. (2021) concluded that while consumption taxes were a vital tool for economic growth, their effectiveness depended on proper administration, taxpayer education, and efficient utilisation of tax revenue for developmental purposes. Balogun and Adeyemi (2021) investigated the long-term effects of VAT revenue on Nigeria's GDP growth, using data from 1980 to 2020. Employing the Vector Autoregression (VAR) model, the study analysed how VAT influenced economic expansion over different decades. The findings showed that VAT had a positive long-term effect on GDP, with a lag of three to five years before significant impacts were observed. The study also found that VAT increases led to higher public investment, particularly in transportation and energy infrastructure, which in turn boosted economic productivity. However, Balogun and Adeyemi (2021) warned that without proper reinvestment of VAT revenues, its economic benefits would diminish. They recommended better fiscal discipline, transparency, and a focus on productive spending to ensure VAT revenue translated into sustainable growth.

Balogun and Hassan (2022) explored how consumption tax revenue influenced public infrastructure development in Nigeria. Using government expenditure data from 1990 to 2021, the study applied the Granger Causality Test and Regression Analysis to measure the relationship between VAT revenue and infrastructure investment. Findings revealed that VAT revenue positively influenced public infrastructure development, particularly in sectors such as transportation, healthcare, and education. However, the study also found that a significant portion of tax revenue was

mismanaged, reducing the effectiveness of VAT in driving infrastructural growth. The study recommended enhanced fiscal transparency, improved budget implementation, and better tax allocation strategies to maximise the economic benefits of consumption tax revenue. It concluded that effective use of VAT funds could stimulate industrialisation and economic expansion.

Bello et al. (2021) conducted an empirical study on the relationship between consumption tax revenue and economic growth in Nigeria, using data from 2000 to 2020. The study employed the Johansen Cointegration Test and Granger Causality Test to determine the direction of causality between VAT revenue and Gross Domestic Product (GDP). Results showed that VAT had a long-run positive relationship with economic growth, indicating that increased VAT revenue contributed to GDP expansion. However, the causality test suggested a unidirectional relationship, meaning that economic growth influenced VAT revenue collection rather than the other way around. This suggested that VAT efficiency depended on the overall performance of the economy. Bello et al. (2021) recommended that Nigeria adopt a more structured approach to tax administration, ensuring that tax revenues were efficiently collected and reinvested into productive sectors. They emphasised the need for lower VAT rates on essential goods to reduce the tax burden on low-income earners while increasing compliance measures among businesses. Eze and Chukwu (2022) explored the relationship between consumption tax revenue and inflation in Nigeria, using data from 1990 to 2021. The study employed the Autoregressive Integrated Moving Average (ARIMA) model to evaluate how changes in VAT rates affected price levels and overall economic growth. The results indicated that while VAT revenue significantly contributed to government income and GDP growth, VAT rate increases had moderate inflationary effects in the short term. However, in the long run, VAT adjustments had a neutral impact on inflation, suggesting that price stability could be maintained with proper fiscal management. The study recommended that Nigeria gradually increase VAT rates while simultaneously implementing price control mechanisms to cushion low-income earners from excessive cost burdens. Eze and Oladipo (2021) investigated how excise duties influenced Nigeria's agricultural sector, using sectoral GDP data from 1995 to 2020. Applying the Vector Autoregressive (VAR) Model, they assessed the impact of excise duties on agricultural output and rural employment. Results indicated that excise duties on agricultural inputs such as fertilisers and machinery harmed agricultural productivity, as farmers faced higher production costs. However, excise duties on imported agricultural goods encouraged local production and food security. The study found that a properly structured excise tax policy could balance revenue generation with agricultural sector growth. The authors recommended reducing excise duties on agricultural inputs to boost productivity while maintaining duties on imported goods to support local farmers. They concluded that tax policies should be tailored to promote Nigeria's agricultural sector, ensuring sustainable economic growth. Obi and Eze (2019) examined how consumption taxes influenced Nigeria's fiscal stability and revenue diversification efforts. The study covered the period from 1990 to 2018 and utilised the Generalised Method of Moments (GMM) estimation technique. Findings indicated that VAT revenue provided a relatively stable source of government revenue, helping to cushion fiscal deficits during periods of low oil prices. The study also found that countries with a higher VAT-to-GDP ratio, such as South Africa and Ghana, exhibited greater fiscal stability than Nigeria, where VAT contributed less than 8% of total revenue. Obi and Eze (2019) recommended a progressive VAT system with exemptions for basic goods and services to encourage public support for tax reforms. They also suggested investments in digital tax platforms to improve collection efficiency and minimise revenue leakages. Ogunleye and Lawal (2018) conducted a study on taxpayer compliance and its effect on consumption tax revenue performance in Nigeria from 1996 to 2017. Using survey data and econometric modelling, the study analysed taxpayer attitudes, VAT evasion rates, and enforcement effectiveness. The findings revealed that VAT compliance was particularly low in the informal sector, which accounted for over 60% of economic activities in Nigeria. Many small businesses failed to remit VAT due to a lack of awareness, weak enforcement, and corruption among tax officials. The study recommended a three-pronged approach to improve. Okafor and Ibrahim (2022) analysed the impact of VAT revenue on Nigeria's manufacturing sector growth, covering 2000–2021. The study used the Johansen Cointegration Test and Vector Error Correction Model (VECM) to determine the long-run relationship between VAT and manufacturing output. Results indicated that VAT had a

negative short-run effect on the manufacturing sector, as higher tax rates increased production costs. However, in the long run, VAT revenue contributed positively to infrastructure development, reducing logistics costs for manufacturers. The study also found that multiple taxation and weak tax policies discouraged industrial expansion. The authors recommended tax incentives for local manufacturers, a reduction in bureaucratic tax procedures, and an improved VAT refund mechanism to encourage growth in the sector. Okonkwo (2022) analysed the impact of indirect taxes, particularly VAT and excise duties, on Nigeria's economic growth from 2005 to 2021. Using a Structural Vector Autoregression (SVAR) model, the study assessed the dynamic effects of tax revenue on GDP growth. The findings indicated that VAT had a more substantial impact on GDP growth than excise duties, suggesting that consumption taxes played a crucial role in revenue mobilisation. The study highlighted the inefficiencies in VAT collection, including multiple taxation issues and resistance from taxpayers. The authors recommended harmonising the tax system to reduce duplication and administrative bottlenecks. Furthermore, the study suggested that increasing the VAT rate slightly, while ensuring effective utilisation of funds could enhance economic development without adversely affecting low-income earners.

For instance, Adegbite and Adesina (2019) and Ajibola and Nwachukwu (2022) examined the impact of VAT on gross domestic product (GDP), concluding that VAT has a significant positive effect on economic growth. However, these studies failed to incorporate other modern revenue streams, such as EMTL, which has become an essential tax instrument in Nigeria's evolving digital economy. Furthermore, existing studies primarily use aggregated taxation data, making it difficult to isolate the specific contributions of different consumption tax components to economic growth. This limitation underscores the need for a more comprehensive study that examines not only VAT but also EMTL, particularly regarding GDP.

3. Methodology

The causal-comparative design is particularly suitable because the study aims to explore and establish the impact of consumption taxes on economic performance, a relationship that cannot be experimentally manipulated but can be observed over time. By analysing historical data, the researcher will identify patterns and determine the nature of the relationship between the variables. The population of the study comprises all officially reported observations on consumption tax (proxied by Value Added Tax) and economic growth indicators for Nigeria across calendar years from 2009 through 2024. This includes the complete time series published by recognized agencies (e.g., FIRS, NBS, CBN, IMF, World Bank) for variables such as VAT/indirect tax revenue, GDP and GDP per capita (constant prices), unemployment/underemployment, poverty measures, and the Human Development Index (HDI). Statistically, the population is the full set of annual observations for these variables within the 2009–2024 horizon.

This study adopts a census (complete enumeration) approach, given its reliance on secondary macroeconomic data. The sampling frame covers annual data on VAT/indirect tax revenue and economic development indicators for Nigeria from 2009–2024, as reported by agencies such as FIRS, NBS, CBN, IMF, and the World Bank.

Model Specification

$$GDP = f(VDT, EMT) \quad (3.1)$$

$$PCI = f(VDT, EMT) \quad (3.2)$$

Transforming equations 3.1 and 3.2 to a testable form

$$GDP = \alpha + \beta_1 VAT + \beta_2 EMT + e_i \quad (3.3)$$

$$PCI = \alpha + \beta_1 VAT + \beta_2 EMT + e_i \quad (3.4)$$

Where

GDP = Gross Domestic Product

PCI = Per Capita Income

VAT = Value added tax

EMT = Electronic money transfer

α = Constant

$\beta_1 - \beta_2$ = Co-efficient of independent variables

ε = Error term

Results

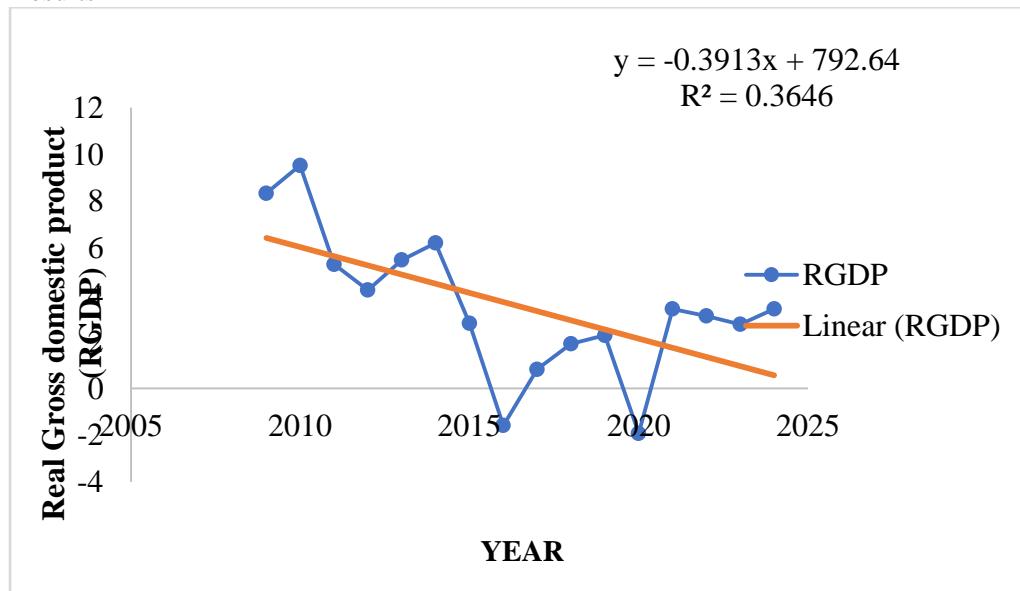


Figure 4.1: Trend of Real Gross Domestic Product (RGDP) in Nigeria from 2008 to 2023

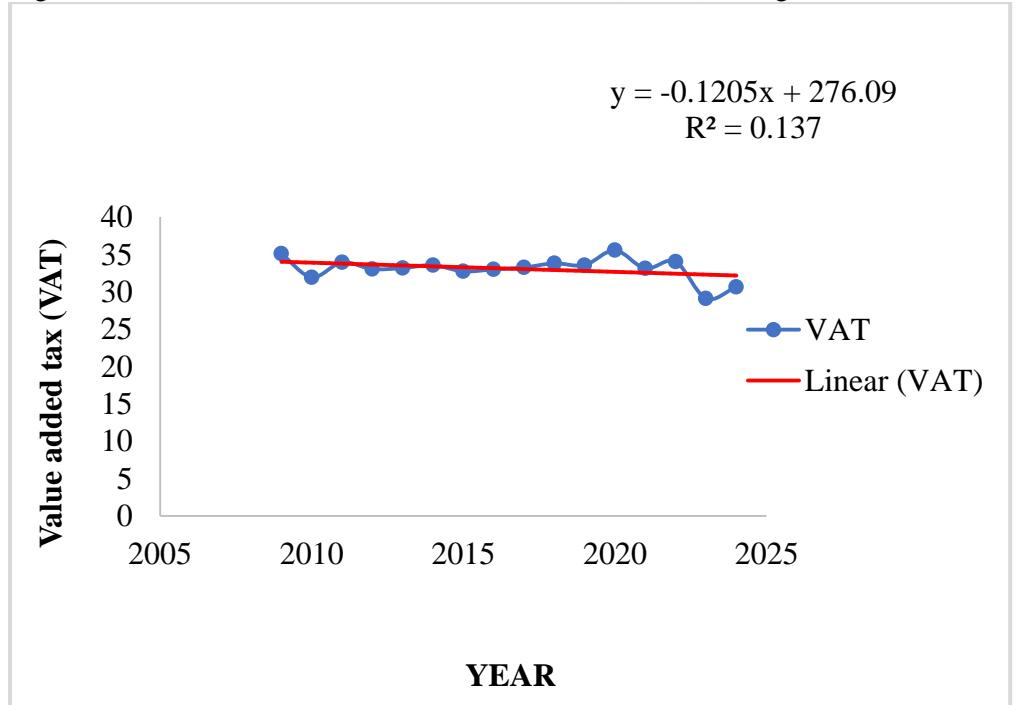


Figure 4.2: Trend of Value Added Tax (VAT) in Nigeria from 2008 to 2023

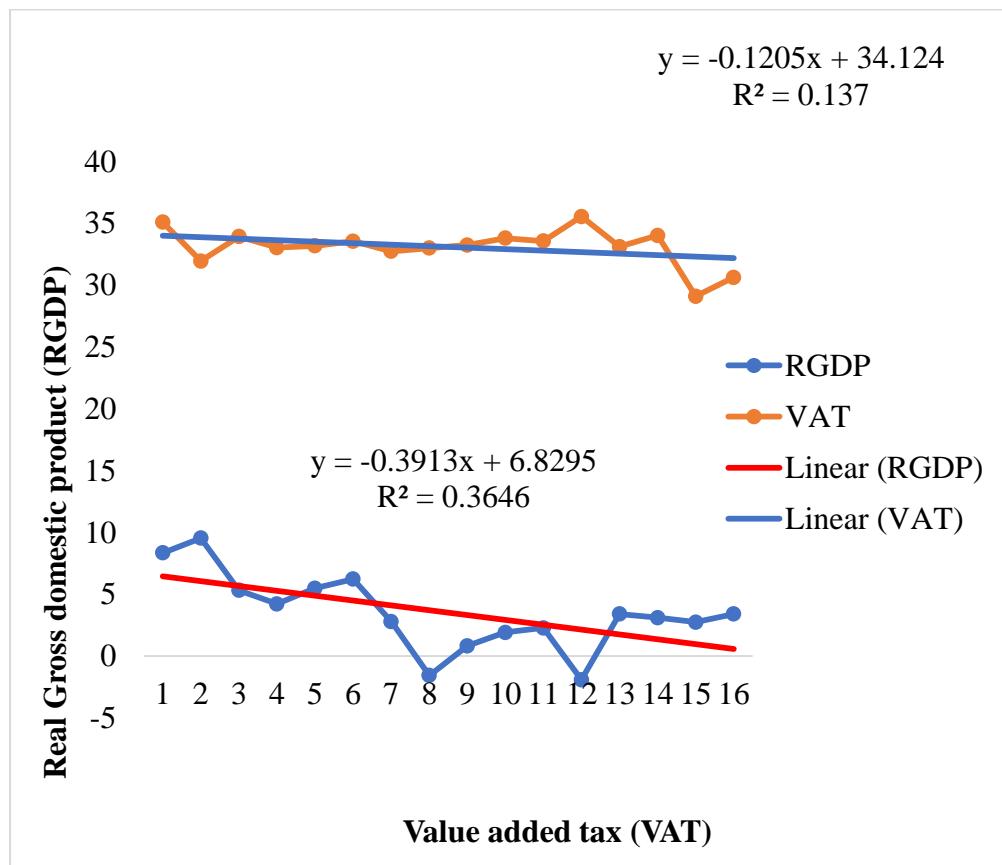


Figure 4.3: Annual Trend of Value Added Tax (VAT) and Real Gross Domestic Product (RGDP) in Nigeria

H01: There is no significant relationship between value-added tax and gross domestic product in Nigeria

Table 4.4: Correlation Coefficient between value added tax and gross domestic product in Nigeria

Correlations

		VAT	RGDP
VAT	Pearson Correlation	1	-.085
	Sig. (2-tailed)		.753
	N	16	16
RGDP	Pearson Correlation	-.085	1
	Sig. (2-tailed)	.753	
	N	16	16

**. Correlation is significant at the 0.01 level (2-tailed).

4. Discussion of Findings

The analysis of the relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) reveals a very weak negative correlation ($r = -0.085$), indicating that VAT changes do not significantly impact economic growth in Nigeria. This finding is particularly noteworthy as it suggests that the expected positive effects of VAT on GDP might not materialise in the Nigerian context. This aligns with the observations made by Werigbelegha & Samuel (2024), who found similar trends in sub-Saharan Africa, indicating that tax policies, including VAT, often fail to effectively stimulate economic activity in the region due to various socio-economic factors. Moreover, the regression analysis indicates that only 0.72% of the variance in GDP can be explained

by changes in VAT. This minimal explanatory power underscores the complexity of economic growth, highlighting that other macroeconomic factors, such as investment levels, inflation rates, and external trade dynamics, may overshadow the impact of tax revenues on GDP. This observation is consistent with the findings of Kharel (2021) and Al-Tamimi & Bataineh (2021), who emphasised that in developing economies, the interplay of multiple factors often determines economic performance, rather than relying solely on tax revenue contributions.

5. Conclusion and Recommendations

In conclusion, this study highlights the relationships between Value Added Tax (VAT) and Gross Domestic Product (GDP), in Nigeria. The analysis shows that VAT has limited impact on economic growth and individual income levels. Specifically, the weak negative correlation between VAT and RGDP indicates that VAT changes do not significantly affect overall economic performance. Policymakers must consider these limitations when designing tax structures and reforms. A comprehensive approach addressing infrastructural deficits and regulatory inefficiencies is crucial for fostering development. By focusing on these issues, there is potential for meaningful improvement in GDP.

In light of these findings, the researcher recommends the following;

- Holistic Economic Policies: Implement broader economic reforms beyond tax measures to stimulate growth and improve income distribution.
- Investment in Infrastructure: Focus on developing infrastructure, education, and job creation to enhance the overall economic environment.
- Strengthening Tax Policies: Reassess VAT structure to ensure and effectively contribute to economic development.
- Promote Financial Inclusion: Encourage policies that integrate digital financial services with traditional economic activities to maximise their impact on growth.
- Further Research: Conduct in-depth studies to explore the factors influencing economic performance in Nigeria and identify effective strategies for improvement.

References

Adebisi, J. F., & Akinlo, A. E. (2019). The impact of consumption taxes on economic growth in Nigeria: Evidence from VAT. *Journal of Economics and Sustainable Development*, 10(12), 53–67.

Adebiyi, A. A., Ayodele, A., & Ogundele, F. (2019). Taxation and economic growth: A study of VAT in Nigeria. *African Economic Policy Review*, 12(3), 58–73.

Adegbite, A. O., & Adesina, T. M. (2019). The impact of value-added tax on Nigeria's economic growth. *African Journal of Economic Studies*, 7(2), 45–61.

Adeniran, K. A., & Olayemi, O. J. (2021). The relationship between VAT revenue and economic growth in Nigeria. *Nigerian Journal of Economic Policy*, 9(4), 87–101.

Aderemi, H. A., Olayemi, T. O., & Balogun, A. O. (2020). Economic diversification and the role of GDP measurement in Nigeria. *Journal of African Development*, 21(3), 143–157.

Adewale, A. F., & Johnson, K. T. (2023). The impact of consumption tax on Nigeria's economic growth: An ARDL approach. *West African Journal of Economic Studies*, 15(1), 52–75.

Adigun, A. O., & Olalekan, A. A. (2020). Consumption tax revenue and economic development in Nigeria: Evidence from ARDL analysis. *Journal of Financial Research*, 12(3), 112–129.

Ajibola, T. O., & Nwachukwu, C. U. (2022). Tax reforms, consumption tax revenue, and economic growth in Nigeria. *Journal of Public Finance*, 19(2), 129–148.

Akinwale, B. O., & Salami, K. O. (2018). Value-added tax and its contribution to economic growth in Nigeria: A time series approach. *International Journal of Business and Finance Research*, 14(1), 99–115.

Alabi, T. A., & Yusuf, M. T. (2020). Excise duties, VAT revenue, and Nigeria's GDP growth. *Journal of Taxation and Economic Development*, 14(2), 152–174.

Alabi, T. A., Olusola, A. T., & Oyebanji, A. O. (2017). VAT and inflation in Nigeria: A study of the impact of VAT rate increase. *African Journal of Economic Review*, 5(3), 71–85.

Al-Tamimi, K., & Bataineh, A. (2021). The effect of tax revenues on GDP growth in Jordan, 655-660. <https://doi.org/10.5267/J.AC.2020.12.012>.

Balogun, O. T., & Hassan, J. B. (2022). The relationship between consumption tax and public infrastructure development in Nigeria. *Economic Policy Review*, 16(2), 77–94.

Chukwu, D. O., & Adeola, P. A. (2020). The effect of VAT on foreign trade and economic performance in Nigeria. *International Journal of Trade and Economic Policy*, 11(4), 193–210.

Edeh, C. O., & Ndu, F. N. (2019). The impact of VAT revenue on the financing of Nigeria's public sector. *African Journal of Financial Studies*, 9(3), 82–97.

Eke, R. C., Chijioke, A. C., & Okorie, P. I. (2018). VAT as a tool for economic development in Nigeria. *International Journal of Business, Economics, and Management*, 3(1), 17–29.

Ekeocha, O. S., & Ugochukwu, J. A. (2020). Value-added tax and economic growth: A comparative analysis of Nigeria and South Africa. *Journal of Fiscal Policy*, 15(3), 121–143.

Ezeani, E. C., & Nwankwo, L. O. (2021). Enhancing VAT compliance in Nigeria: Challenges and strategies. *International Journal of Taxation*, 8(2), 45–56.

Fapohunda, T. M., & Olaitan, O. K. (2020). Consumption tax and its implications for government revenue in Nigeria. *Nigerian Journal of Taxation*, 10(2), 101–120.

Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). Sage Publications.

Folawewo, A. O., & Adegbite, P. M. (2018). Analysing the short-term and long-term impact of VAT on economic growth in Nigeria. *International Journal of Economic Research*, 16(3), 89–106.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson Education.

Ibrahim, A. Y., & Okafor, P. T. (2021). Value-added tax and manufacturing sector growth in Nigeria: Evidence from cointegration analysis. *Journal of Industrial and Economic Studies*, 17(2), 58–77.

Igbinomwanhia, L. I., Omotayo, T. A., & Eze, U. O. (2021). Value added tax, income inequality, and per capita income in Nigeria: A critical examination. *Journal of Nigerian Economic Review*, 10(1), 45-60.

Ijeoma, N. M., Ugwu, E. O., & Ugochukwu, O. C. (2020). The relationship between VAT and Nigeria's GDP growth: An empirical analysis. *Nigerian Journal of Economics*, 24(2), 39-51.

Iwuoha, C. M., & Chukwuemeka, E. (2019). The impact of VAT on economic well-being: Evidence from Nigeria. *Global Journal of Economics*, 8(5), 42-55.

Jimoh, R. O., & Oladimeji, K. A. (2019). VAT revenue and the performance of the Nigerian economy: An empirical review. *African Economic Review*, 9(2), 131–149.

Lawal, K. T., & Olanrewaju, A. A. (2020). The nexus between VAT, excise duties, and Nigeria's economic expansion. *Journal of Economic Growth and Development*, 13(1), 99–121.

Makinde, F. A., & Idowu, J. O. (2022). The role of consumption tax in economic growth and fiscal sustainability in Nigeria. *West African Journal of Finance and Economics*, 20(1), 76–92.

Musa, B. L., & Samuel, F. O. (2021). The contribution of VAT to Nigeria's GDP: An empirical analysis. *African Journal of Economic Policy and Administration*, 14(3), 54–73.

Ndukwe, C. A., & Akpan, R. O. (2020). The impact of VAT on Nigeria's informal sector and its implications for economic growth. *Journal of Development Finance*, 16(1), 85–102.

Nwosu, D. P., & Obinna, O. F. (2019). Consumption tax, government revenue, and economic development: A Nigerian perspective. *International Journal of Public Finance*, 11(2), 119–137.

Obayemi, I. K., & Adigun, M. T. (2022). Taxation and economic transformation: The role of VAT in Nigeria's industrial growth. *Nigerian Journal of Economic Policy Studies*, 19(4), 112–130.

Odetayo, T. A., Oyinloye, A. A., & Obafemi, A. O. (2018). Analysis of economic growth and diversification of Nigeria's economy. *Global Journal of Economic Studies*, 6(3), 15-29.

Ogunleye, B. M., & Adeleke, O. J. (2018). Value-added tax, economic stability, and fiscal policy efficiency in Nigeria. *International Journal of Economic Development*, 10(3), 98–114.

Ogunleye, O. S. (2020). The impact of VAT and inflation on Nigeria's economic growth. *International Journal of Economics and Finance Studies*, 12(1), 45–60.

Ogunleye, P. T., & Ibe, K. C. (2021). Consumption tax, income distribution, and economic inequality in Nigeria: A microeconomic analysis. *Journal of Social and Economic Policy*, 14(2), 67–85.

Ojo, F. R., & Adekunle, A. S. (2020). VAT policy reforms and their impact on economic growth in Nigeria. *African Journal of Policy Research*, 17(3), 77–95.

Okafor, P. J., & Ibrahim, F. O. (2022). Value-added tax and Nigeria's manufacturing sector: A VECM analysis. *Journal of Economic Analysis*, 19(1), 104–123.

Olaniyi, K. O., & Olorunfemi, A. T. (2021). Analysing the effect of VAT on government capital expenditure in Nigeria. *West African Journal of Public Finance*, 15(2), 92–111.

Olanrewaju, A. O., & Falola, O. O. (2020). Increasing per capita income through economic diversification in Nigeria. *African Journal of Policy Studies*, 18(2), 61-75.

Olowookere, F. O. (2018). The role of VAT in Nigeria's economic development. *African Journal of Business Management*, 12(3), 45 – 59.

Omorogbe, T. R., & Eze, K. J. (2020). The relationship between VAT revenue and infrastructural development in Nigeria. *Journal of Economic Development and Policy*, 16(1), 118–134.

Omotayo, A. B., & Suleiman, L. T. (2022). VAT and its effect on small and medium-sized enterprises in Nigeria. *African Journal of Business Policy*, 19(3), 78–96.

Omotayo, T. A., Abiola, A. O., & Ibrahim, B. (2018). VAT revenue and its effect on Nigeria's GDP: A detailed study. *International Journal of Economics*, 7(2), 85-96.

Osei, E., & Akoto, I. (2019). Consumption taxes and their role in revenue generation: A comparative study of selected African countries. *African Review of Economics and Finance*, 11(1), 1-2.

Pallant, J. (2013). *SPSS survival manual* (5th ed.). Open University Press.

Rostow, W. W. (1960). *The stages of economic growth: A non-communist manifesto*. Cambridge University Press.

Samuel, C. U., & Okonkwo, P. T. (2021). The fiscal impact of VAT on Nigeria's economic growth. *Journal of Public Policy and Finance*, 12(4), 95–112.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.).

Pearson Education.

Udo, P. D. (2019). The impact of VAT on Nigeria's revenue generation and economic development. *International Journal of Public Administration*, 42(2), 85–102.

Werigbelegha, A., & Samuel, O. (2024). Determinants of Value-Added Tax and Economic Performance in Nigeria. *AKSU Journal of Social Sciences*. <https://doi.org/10.61090/aksujoss.2024.021>.

Yusuf, A. R., & Balogun, H. T. (2019). The implications of VAT revenue on Nigeria's economic development. *West African Economic Review*, 14(2), 57–76.